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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
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End User Common Line Charges )  
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CC Docket No. 95-72

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Reply Comments of Nortel

I. INTRODUCTION

Northern Telecom Inc. ("Nortel") hereby files reply comments in the above-captioned rule making<sup>1/</sup> because of the importance of Integrated Services Digital Network ("ISDN") offerings to the future of the National Information Infrastructure ("NII"). Even before this proceeding commenced, Nortel's Chairman had expressed to the Commission concern that the existing rules imposing multiple subscriber line charges ("SLCs") on ISDN end users will decrease demand for ISDN at precisely the time when government policies should be encouraging deployment of capabilities that will allow the largest numbers of consumers to use the most technologically advanced products.<sup>2/</sup> The comments of users,

<sup>1/</sup> Notice of Proposed Rulemaking, CC Docket No. 95-72, FCC 95-212 (rel. May 30, 1995) (the "Notice"). Unless otherwise specified, all comments cited in this pleading are those filed in CC Docket No. 95-72 on June 29, 1995.

<sup>2/</sup> Letter from Donald J. Schuenke, Chairman of the Board, Nortel, to Reed E. Hundt, Chairman, FCC (Mar. 28, 1995).

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computer manufacturers, and most providers of NII services support Nortel's position. Wide ISDN deployment will occur if user demand, rather than application of burdensome regulation, governs ISDN deployment.

Nortel is the second largest telecommunications equipment manufacturer in the United States, supplying systems to businesses, universities, local, state, and federal governments, the telecommunications industry, and other institutions worldwide. The company employs more than 22,000 people in the United States in manufacturing plants, research and development centers, and in marketing, sales, and service offices across the country.

Nortel and its employees have a strong interest in the wide deployment of ISDN. Nortel is a major supplier of ISDN equipment, having placed in service the first public network ISDN switch in North America in 1986, in Phoenix, Arizona. Nortel has added ISDN capabilities to numerous central offices. Nortel manufactures ISDN network switching equipment and customer premises equipment ("CPE"). As a leading developer of ISDN technology, Nortel is well-acquainted with the current state of that technology.

Nortel believes that ISDN will prove to be an important part of the NII if it is allowed to develop without unduly burdensome regulatory burdens. By permitting residential users to obtain multiple derived channels over their existing copper loops, ISDN will help the growth of such important economic and educational activities as telecommuting and distance learning. Greater use of ISDN by businesses will similarly promote the economic growth and accompanying job creation that are the goals of U.S. NII policy.

## II. IMPLEMENTATION OF ISDN DOES NOT SUBSTANTIALLY CHANGE LOOP COSTS

As a technical matter, the principal costs of ISDN are related to the electronics located in ISDN-equipped central office switches and in the digital CPE designed for ISDN use. Based on Nortel's experience, the costs of the loop plant do not substantially change whether ISDN or traditional analog voice-grade service is offered over that loop. A goal of ISDN deployment has been to introduce end-to-end digital service into the public switched telephone networks while avoiding costly changes to existing loop plant. As a result, the principal network cost items in implementing ISDN are the electronics located in ISDN-equipped central offices -- the "line cards" associated with each loop but located within the serving switches.<sup>3/</sup> Although ISDN loops must satisfy certain technical requirements (such as no bridge taps),<sup>4/</sup> extensive line conditioning or upgrades are not routinely required.<sup>5/</sup>

The implications regarding the imposition of SLCs on ISDN offerings are clear. Because loop costs do not vary substantially between ISDN offerings and traditional analog services, the options presented in the Notice for applying SLCs to ISDN are reflections of different policy preferences rather than ways to recover the economic costs of ISDN loops.

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<sup>3/</sup> See United States Telephone Association ("USTA") Comments at 10, citing Petition for Waiver of Part 69.104 as Applied to Derived Channel Services such as ISDN, Pacific Bell (filed Feb. 21, 1995) at 1; Tele-Communications Association ("TCA") Comments at 5-6.

<sup>4/</sup> See, e.g., specifications in ANSI 2B1Q Line Coding.

<sup>5/</sup> Basic Rate Interface ("BRI") ISDN services, which provide two digital voice grade ("B") channels and one digital data ("D") channel, require loop plant consisting of one twisted copper pair. Primary Rate Interface ("PRI") ISDN services, which provide twenty-three B channels plus one D channel, require two twisted pairs. However, because multiple twisted pairs are commonly installed to each customer location, the costs of using two pairs are not double those of using one. See TCA Comments at 6-7.

As a result, the Commission's decision regarding the application of SLCs to ISDN will send a strong signal regarding its policy priorities for the development of ISDN (and, presumably, other new network technologies). Nortel strongly recommends that the Commission act to encourage widespread, market-driven deployment of ISDN. It can do so best by avoiding the unnecessary imposition of multiple SLCs on ISDN end users.<sup>6/</sup>

### III. WIDESPREAD ISDN DEPLOYMENT WILL OCCUR IF DRIVEN BY USER DEMAND, NOT LIMITED BY REGULATORY POLICY

The comments of users, manufacturers, on-line services providers, and many carriers emphasize the benefits of widespread ISDN deployment.<sup>7/</sup> The majority of commenters favor some variation of the "one SLC per facility" proposal in the Notice. Indeed, even commenters that propose other approaches acknowledge the benefits possible from ISDN.<sup>8/</sup>

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<sup>6/</sup> In this regard, some commenters refer to the costs of ISDN-compatible CPE as a hurdle to wider ISDN deployment. See, e.g., American Petroleum Institute ("API") Comments at 5, Northern Arkansas Telephone Company Comments at 4. Such costs should decline as economies of scale are realized in manufacturing and marketing such CPE, and as CPE is increasingly standardized. Of course, SLCs do not recover CPE costs, which the user bears independently. By depressing demand, the imposition of multiple SLCs would slow the creation of scale economies, thereby delaying lower prices, for ISDN-compatible CPE.

<sup>7/</sup> See, e.g., TCA Comments at 3-5, API Comments at 2,4, National Public Radio Comments at 3-5, cf. Communications Managers Association Comments (users). See also Information Technology Industry Council Comments at 3-4, Microsoft Comments at 2 (hardware and software manufacturers); Joint Comments of America Online, Compuserve, GE Information Services, and Prodigy at 6 (on-line service providers); USTA Comments at 3-6, 15-16, Pacific Bell and Nevada Bell Comments at 1-2, Bell Atlantic Comments at 3, MCI Comments at 3, Rural Telephone Coalition Comments at 2-3 (carriers).

<sup>8/</sup> See, e.g., US West Comments at 3.

The Commission's priority in this proceeding should be to encourage widespread ISDN deployment. It can do this best by permitting such deployment to develop from user demand, rather than to limit it with unnecessary regulatory impediments. Nortel agrees with those commenters that call on the Commission to avoid depressing ISDN demand by imposing multiple SLCS on ISDN or otherwise burdening the carriers now deploying ISDN. The consequences to the U.S. economy and the NII of harming the nascent use of ISDN services are pressing. The development of ISDN is at a stage where excessive regulatory costs can shut down the service. The effects of wider ISDN use on the access charge regime can be addressed by the Commission in the context of broader access charge reform.

#### IV. THE COMMISSION SHOULD COMMENCE A PROCEEDING SEEKING BROAD REFORM OF THE ACCESS CHARGE RULES

This proceeding demonstrates that development of the NII, through ISDN and other technologies, is outstripping traditional forms of regulation such as the access charge structure. Although commenters advocate a variety of ways to apply SLCs to ISDN, there is little debate in the record that access charge reform is necessary.<sup>9/</sup>

Nortel supports commencement of a broad access charge reform proceeding after addressing the important ISDN issues raised in this docket. By doing so, the Commission will permit more efficient development of the NII, and more rapid deployment of advanced technologies and services, in an increasingly competitive, and technically sophisticated, environment. Such a proceeding is needed to address the fundamental issues raised in this

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<sup>9/</sup> See, e.g., USTA Comments at 7, Pacific Bell and Nevada Bell Comments at 5-6, Bell Atlantic Comments at 6, GTE Comments at 20-22, Microsoft Comments at 4.

rule making, such as whether SLCs should be increased generally and the future of the carrier common line ("CCL") charge.

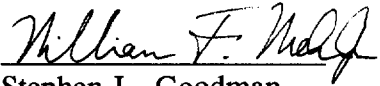
V. CONCLUSION

Nortel respectfully requests the Commission to encourage widespread, market-driven deployment of ISDN. It best can do so by avoiding the unnecessary imposition of multiple SLCs on ISDN end users. After resolving the important ISDN issues raised in this docket, the Commission should begin a broad proceeding to reform the access charge rules.

Respectfully Submitted,

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July 14, 1995

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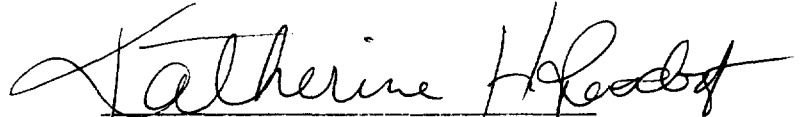
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